

Annual Examination 2021-2022
Subject - Science

Time : 3 Hrs.

Class - 9

M.M. : 70

Direction : There are 30 questions in this question paper. All questions are compulsory. Marks allocated to every question indicated against it.

Choose the correct answer (Question 01 to 05)

1. **Unit of Velocity is :** 1
(a) Meter (b) Meter/Second
(c) Meter/Second² (d) Second
2. **Which organelle is called 'Power House' of the cell :** 1
(a) Lysosome (b) Nucleus
(c) Golgi body (d) Mitochondria
3. **Water stored in a dam possesses :** 1
(a) Potential energy (b) Kinetic energy
(c) Electrical energy (d) No energy
4. **Separation of cream from milk can be done by :** 1
(a) Chromatography (b) Distillation
(c) Centrifugation (d) Evaporation
5. **Which is a non-infectious disease ?** 1
(a) Malaria (b) Covid
(c) Cancer (d) AIDS
6. **Name the scientist, who discovered electron ?** 1
7. **Write the unit of force.** 1
8. **Write the names of two colloids.** 1
9. **Write the first equation of motion.**
10. **What is the accepted equation value of 'G' ?** 1
11. **Write the chemical formula of these compounds :** 2
(a) Sodium Oxide (b) Aluminium Chloride
12. **An object travels 20 metres in 5 seconds and then another 25 metres in 4 seconds. Calculate the average speed of the Object ?** 2
13. **Classify the following changes as physical and chemical :** 2
(a) Melting of butter (b) Cutting of trees
(c) Burning of wood (d) Rusting of iron
14. **Which organelle is called 'Suicidal bag' of the cell and why ?** 2
15. **What do you understand by vaccination ? Write the names of any two vaccines.** 2
16. **State the first law of motion with appropriate example.** 2

17. Define the universal law of Gravitation.

OR

Mass of an object is 10Kg. Calculate its weight on earth.

18. What are the various energy transformations that occurs when you are riding a bicycle ? 2

19. What is kinetic energy ? Explain with example.

20. Identify the type of the tissue in following : 2
Skin, Bone, Bark of tree, Heart

21. Give reasons : 3

(a) Some leaves may get detached from the tree, if we shake its branches.

(b) If someone jumps to the shore from a boat, boat moves in opposite direction.

(c) A stone hurts us more than a rubber ball of same size.

22. Calculate the molecular mass of : 3

(a) HCl (b) Na_2O (c) CH_4

OR

Define :

(a) Solution (b) Suspension (c) Colloid

23. What are isotopes ? Give examples. Write any two applications of isotopes. 3

24. Draw a neat and labelled diagram of a neuron. 3

25. What precaution can you take in your school to reduce the incidence of infectious diseases. <https://www.ukboardonline.com> 3

26. (a) Which would require a greater force : 3

(i) accelerating 4kg mass at 10m/s^2

(ii) accelerating 8kg mass at 4m/s^2

(iii) Explain the third law of motion with example.

(b) Explain the third law of motion with example. 2

27. (a) Show electronic distribution of these elements : 3

Carbon, Sodium, Chlorine

(b) Describe Bohr's model of atom. 2

28. (a) Who discovered cell and when ? 1

(b) Draw a neat and labelled diagram of a plant cell. 4

29. (a) What do you understand by mixture ? Describe its types. 3

(b) Explain, how would you separate oil and water from their mixture. 2

30. (a) What do you mean by tissue ? 1

(b) What are the three types of muscular tissues ? Differentiate them with diagram. 4

OR

What are the three types of simple permanent tissues ?
Differentiate them with diagram.

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